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A healthy settings framework: an evaluation and comparison of midwives' responses to addressing domestic violence

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Abstract

Objectives: to compare and contrast how midwives working in either hospital- or community-based settings address domestic violence by evaluating their views on: prevalence of domestic violence; their role in addressing domestic violence; the acceptability of routine enquiry; and barriers encountered in asking clients questions about violence and abuse in pregnancy.

Design: a postal survey questionnaire.

Setting: Northern Ireland.

Study population: 983 hospital and community midwives.

Findings: overall, 488 midwives returned a completed questionnaire; a 57% response rate. Comparisons were made using descriptive, inferential statistics and cross-tabulation. Although there were significant differences between hospital- and community-based midwives in relation to domestic violence, both groups of midwives tended to underestimate its prevalence.

Key conclusions: the findings suggest that midwives *per se* identify and respond to a fraction of the cases of domestic abuse in pregnancy, due to lack of confidence, education and training. This reinforces the need for both hospital and community midwives to gain further confidence and an understanding of the many psychosocial factors that surround domestic violence.

Implications for practice: healthy settings theory can be used effectively to identify good practice with women who experience domestic violence. Effective investment for health care requires the gaps between hospital- and community-based practice to be bridged, and for work to be integrated.

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Keywords Domestic violence; Pregnancy; Midwifery; Healthy settings theory

Introduction

Violence is a major public health issue internationally, and domestic violence (DV), in particular, represents a serious public health issue for women and children all over the world (Tjaden and Tjaden, 2000; World Health Organization, 2000, 2002). In the UK, one in four women experience DV at some point in their lives (Bacchus et al., 2002; Jasinski, 2004), and this violence accounts for almost one-quarter of all crime (Home Office, 2003). Disturbingly, the violence is hidden in many instances (Gazmararian et al., 1996; Jewkes et al., 2002). Women remain silent and excluded; however, what is clear from the literature is that it is likely to escalate in frequency and intensity over time, and may increase at specific points, especially during pregnancy.

Pregnancy is seen as a high-risk period for DV and may prompt the initial episode or an escalation of a pre-existing abusive relationship (Stewart and Cecutti, 1993; Baird, 2002; Bradley et al., 2002; Johnson et al., 2003; Shadigian and Bauer, 2004). This abuse may not only produce physical injuries but also a range of psychosocial effects upon the mother such as alcohol and drug dependence, unemployment, homelessness, suicide attempts, depression, anxiety and post-traumatic stress disorder (Amaro et al., 1990; Martin et al., 2001; Lemon et al., 2002; Richardson et al., 2002).

The risk for the unborn fetus is also considerable as violence may increase rates of miscarriage, premature birth, low birth weight, chorioamnionitis, fetal injury and fetal death (Connolly et al., 1997; Mezey and Bewley, 1997; Shumway et al., 1999; Bacchus et al., 2002; Craig, 2003). It is beyond doubt that intimate partner violence has a profound effect on women's pregnancies and pregnancy-related decisions (Lutz, 2005). To the authors' knowledge, this is the first study to provide comparative data for midwives working in hospital settings and community health-care practice settings on their perceived role in addressing DV.

Midwives have always had a role in public health; however, there is now an explicit need for the profession to direct its attention to issues such as DV. Indeed, there are clear messages from government and international research to indicate that health professionals should be actively involved in tackling this significant public health issue (Department of Health and Social Services and Northern Ireland Office, 1995; Department of Health, Social Services and Public Safety, 2003; Parker et al., 1999; Department of Health, 2000, 2001; Price, 2003; Jasinski, 2004). In the UK, for example, in

response to rising levels of DV towards women, many professional organisations have published recommendations or guidelines (Royal College of Midwives, 1997; British Medical Association, 1998; Community Practitioners and Health Visitors Association, 1998; Royal College of Nursing, 2000) suggesting that health professionals have a major role in helping women to disclose DV and ensuring that advice and support is available to them. Such guidance is matched in many countries. For example, in the USA, the Violence Against Women Act ensures that communities have the tools to assess and prevent violence at home (US Congress, 2005); in Australia, the Department of Health has explicit guidance for health professionals' responses to family violence and DV (State of Western Australia and Department of Health, 2001); and in New Zealand, the Ministry of Health (2002) has produced consensus-based guidelines health setting out the principles of intervention for health professionals.

Although it is not common practice for midwives in Northern Ireland (NI) to assess or screen pregnant women for DV, research has advocated that midwives should ask all pregnant women routinely about abusive relationships (Royal College of Midwives, 1997; British Medical Association, 1998; Davidson et al., 2000; Taket et al., 2003). However, for appropriate assessment in situations where DV is known or suspected, midwives must have up-to-date knowledge and the skills required to ask questions to identify those women experiencing DV, and to offer the appropriate interprofessional help and interagency support (Paluzzi and Houde-Quimby, 1996).

Evidence suggests that although 35% of women already suffering DV experience an increase during pregnancy and the postpartum period, they are rarely identified by midwives (King and Ryan, 1996; Thompson et al., 2000; Bacchus et al., 2002, 2005; Espinosa and Osborne, 2002; Nasir and Hyder, 2003). This finding may represent a reluctance by midwives to discuss the topic of DV with their clients, arising in many cases from fears and anxieties about causing offence, revealing something that may escalate out of control, not knowing what to do if DV is disclosed, embarrassment, or, at a personal level, identification with DV either as a victim or perpetrator (Department of Health, 2000; Bacchus et al., 2002). However, this reluctance may also correspond, in general, to a lack of understanding of their perceived professional role in addressing DV, or a lack of education and available information about questioning and screening protocols (Taket et al., 2003). Importantly, at a more basic level, the opportunity to ask the question may

not always be available, i.e. a partner or other family member may be present (Price, 2003; Taket et al., 2003; Jasinski, 2004).

It must also be remembered that victims of DV may also be reluctant to disclose abuse for a variety of reasons, including: reprisals from their partner; an outsider becoming involved; embarrassment; and, importantly, fear of losing their children if social services become involved. Research, however, has shown that these women often hope that someone will realise that something is wrong and ask them about it (Department of Health, 2000; Gielen et al., 2000; Bacchus et al., 2002; Mezey et al., 2003; Taket et al., 2003). It is therefore extremely important for midwives in both community and hospital settings to ask women routinely about DV and to offer support and information.

Healthy settings theory and practice

This paper reports on a study that identified midwives' knowledge, attitudes and experience of DV and examined how midwives in NI address DV in their client population. Although the evidence base is rapidly expanding on midwives' identification and management of DV, no research has evaluated differences in responses, using a healthy settings framework, between midwives working in hospitals compared with community-based practice settings. Different ideologies are linked to the practice setting in which midwives work, as hospital and community environments present fundamentally different work settings with diverse values and perspectives (Hunter, 2004). There is evidence to suggest that hospital settings produce midwives who concentrate more on the physical aspects of care rather than the provision of psychosocial support for new mothers (Henderson, 2002; Hunter, 2004). In contrast, several government publications suggest that community-based settings support midwives to work according to a 'woman-centred' approach within their practice setting (Department of Health, 2000; House of Commons Select Committee, 2003).

The rationale for a healthy settings approach is based on the premise that health is largely 'produced' outside illness and the health service, and that public health developments, such as identification of DV, require investment in the socio-ecological systems in which people actually live their lives (Baric, 1993, 1994; Grossman and Scala, 1993; Kickbusch, 1995; Freund et al., 1996; Dooris et al., 1998; Dooris, 2004). The concept and practice of healthy settings has developed over the last 15 years to become an element of public health

strategy at local, national and European levels (Dooris, 2002). It is influential in shifting 'health' away from problem-oriented individual interventions, towards a more holistic socio-ecological model reflecting a focus on what has been described as 'salutogenesis' or health creation (Antonovsky, 1987), which is concerned with developing supportive contexts within the places that people live their lives (Kickbusch, 2003). It also acknowledges that each health setting is part of a greater whole, functioning as an 'open system' in synergistic exchange with the wider environment (Paton et al., 2005).

A holistic and multidisciplinary approach, it is underpinned by principles such as community participation, partnership, equity and empowerment, and has perspectives drawn from: Health for All (Health 21) (World Health Organization, 1998b); Ottawa Charter for Health Promotion (World Health Organization, 1986); and Agenda 21 (World Health Organization, 1998a). A common way of understanding the settings approach is by separating out its three key elements:

- creation of supportive and healthy living environments;
- integration of health promotion into the daily activities of the health setting; and
- development of links with other settings and with the wider community by recognising that people's lives straddle various settings.

Study

The purpose of this paper is to offer for debate a framework that will promote an effective organisational infrastructure when developing and supporting midwives working with DV. The framework identifies key settings that need to work effectively in isolation, but also clearly need to integrate to ensure a 'joined-up' approach to organisational thinking and working. Indeed, the underpinning communications to link the systems together are often missing (Dooris, 2004).

Aims

This study, conducted between December 2002 and August 2003, aimed to compare and contrast how midwives in NI working in either hospital- or community-based health-care practice settings address DV in their client population by evaluating:

- their perceived views on the rate of DV;
- their perceived professional role in addressing DV;

- their acceptability of routine screening for DV within a health-care setting; and
- the barriers they encounter when asking clients questions about violence and abuse in pregnancy within their health-care settings.

Methods

Study population

A letter was sent to all registered NI midwives working in seven locations ($n = 983$) inviting them to participate in this study. The locations included five hospital and community settings. Following exclusion of midwives who were on maternity leave, career break or long-term sick leave, 861 midwives ($n = 88\%$) remained. Demographic details requested included hospital/community setting, age and full- or part-time employment. Educational and training details of addressing DV in their client population were also obtained.

Ethical considerations

The Queen's University Belfast Research Ethics Committee stated that formal ethical approval was not required. However, in the light of the new requirements of research governance, participants were asked to complete an informed research consent form and assured that their responses would be confidential and remain anonymous. All questionnaires were secured in a locked cabinet and retained for audit after data analyses. To ensure anonymity, each questionnaire was coded, which allowed data to be entered into a computer using this code. With international evidence suggesting that one in three (Bacchus et al., 2002) or one in four (Jasinski, 2004) women experience DV at some point in their lives, a strong likelihood existed that a percentage of the midwives within this study may have experienced or be experiencing DV. The researchers therefore felt that a support mechanism should be offered, and a telephone number of a 24-h DV helpline was included on the final page of the questionnaire.

Procedure

Questionnaire design and reliability

The Midwives' Knowledge and Attitudes to Domestic Violence Scale was developed and validated for the purposes of this study with reference to the evidence-based international literature on DV in pregnancy and healthy settings theory (Kickbusch,

1995; Freund et al., 1996; King and Ryan, 1996; Mezey and Bewley, 1997; Dooris et al., 1998; Bacchus et al., 2002; Kim and Motsei, 2002; Dooris, 2004; Jasinski, 2004). Using this material as a base, a 22-item questionnaire scale was compiled to measure midwives' knowledge and attitudes to DV in different settings, their perceived professional role in addressing and responding to DV, their views on routine questioning or screening of all pregnant women, and identification of any barriers they may have encountered in dealing with the issue of DV in their practice setting (Lazenbatt et al., 2005). The questionnaire measured midwives' views on the number of women they perceived to be affected by DV. This was achieved by offering a selection of six probabilities worded as a 'one in x' chance that a woman drawn at random had been the victim of DV. These possibilities ranged from one in 25 (probability of 0.04) to one in two (probability of 0.5).

The scale had a five-point Likert format along with several open-ended questions which allowed 'free-text' subjective responses, and was pilot tested on experts in midwifery and health visiting ($n = 21$). On the basis of the pilot test, the wording of the questionnaire was revised to enhance readability and content validity. The questionnaire was further developed using exploratory factor analysis to ascertain overall reliability and validity of the scale (Lazenbatt et al., 2005). Analysis resulted in a three-factored scale with overall reliability or internal consistency of 0.7 calculated using Cronbach's alpha (Cronbach and Meehl, 1955).

Questionnaire distribution and return

Each participant received an envelope containing a research information sheet, an informed research consent form, a six-page double-sided coded questionnaire and two blank envelopes. To ensure anonymity, midwives were instructed to return completed questionnaires and signed consent forms in the separate envelopes provided to a specified collection point. Whilst return of completed questionnaires perhaps implies consent, the research team chose to include a consent form to address issues of research governance and explicit participation. Distribution and collection of completed questionnaires and signed informed research consent forms to hospital and community midwives spanned a four month period from May to August 2003.

Statistical analysis

Data from each coded questionnaire were entered into a database and analysed using Statistical

Package for the Social Sciences Version 12.0.1. To assure anonymity, data were entered using a coded number for potential follow-up. Comparisons were made using inferential statistics, with Pearson's χ^2 -test of association and the χ^2 -test for trend (Altman, 1991, pp. 261–265). To reduce the bias introduced by estimating the distribution of the discrete test statistic by a continuous χ^2 distribution, Yates' continuity correction was applied for all 2×2 comparisons (Altman, 1991, pp. 252–253).

Findings

Overall, 488 midwives returned a completed questionnaire, giving a response rate of 57%.

Sample demographics

Midwives based in a hospital setting accounted for 80% of the cohort, with 39% employed full-time, and 57% over 40 years of age (see Table 1). Significantly more community midwives (65%) were employed full-time [continuity corrected $\chi^2 = 20.4$, degrees of freedom (df) = 1, $p < 0.001$], and significantly more community midwives (71%) were >40 years of age (continuity corrected $\chi^2 = 5.64$, df = 1, $p < 0.05$).

Midwives' views on the proportion of women they perceived to be affected by DV

When enquiring about the proportion of women viewed to be affected by DV, this study found that many of the midwives were not aware of the true

extent. It has been established that the true extent of DV amongst women is one in four (Bacchus et al., 2002). The midwives were given a series of options that form an ordinal scale, but one in which there was a large gap between one in eight (12.5% chance) and the next option one in four (25% chance). The scale was dichotomised between below estimate (options up to and including one in eight) and near the mark. An analysis of hospital and community midwives showed that:

- overall, the majority of midwives (66%) viewed the prevalence of DV to be well short of the 'truth'; and
- a smaller proportion of community midwives compared with hospital midwives had this perception (54% versus 69%, $\chi^2 = 6.56$, $p = 0.01$) (see Table 2).

Midwives' perceived role in responding to DV and their views on routine screening

Almost all participants, irrespective of whether they were based in a hospital (92%) or community (93%) setting, felt that they had a significant role to play in responding to DV (see Table 3).

Routine screening for DV

Participants were asked for their views on routine screening. Approximately half of the midwives in both the hospital (52%) and community (55%) settings were in favour of routine screening for all pregnant women (see Table 3).

Table 1 Demographic details of midwives in hospital and community settings.

Demographic details (n = 488)	Hospital setting		Community setting		Continuity corrected Chi squared on 1 df χ^2	Significant p-value
	n	%	n	%		
Participants	393	80	95	20		
Employment						
Full-time	153	39	62	65	20.4	<0.001
Part-time	240	61	33	35		
Age (years)						
≤40	168	43	27	29		
>40	225	57	76	71	5.64	0.018
Missing	–	–	1	–		

df, degrees of freedom.

Percentages in the tables were calculated after removal of the non-responders; however, for completeness, the number of non-responders is shown.

Table 2 Midwives' self-reported responses to the proportion of women they perceived to be affected by domestic violence (DV).

	Women affected by DV	Frequency	Percentage	Cumulative percentage	
Valid	1/100	2	0.4	0.4	Unrealistic
	1/25	75	15.6	16.0	
	1/10	133	27.7	43.8	
	1/8	105	21.9	65.6	
	1/4	145	30.2	95.8	Realistic
	1/3	20	4.2	100.0	

Only one-third of midwives were realistic in their perception of DV affecting one in four women.

Two-thirds of midwives considerably underestimated 'the generally accepted' probability of DV.

Cross-tabulation of hospital/community midwives who believe no more than one in eight women are affected by DV.

			Hospital/community		Total
			Hospital	Community	
Believe no more than one in eight women affected by DV	No	Count	122	43	165
		% within hospital/community	31.5%	46.2%	34.4%
	Yes	Count	265	50	315
		% within hospital/community	68.5%	53.8%	65.6%
		Count	387	93	480
		% within hospital/community	100.0%	100.0%	100.0%

$\chi^2 = 6.557$ continuity correction factor, $p = 0.01$.

Underestimators totalled 69% of the hospital group compared with 54% of the community group.

Most appropriate time to enquire about DV

When the participants were asked for their views about when they felt was the best time to ask a pregnant woman questions on DV, significant differences were observed. In all, 65% of hospital midwives and significantly fewer community midwives (44%) opted for the booking visit (continuity corrected $\chi^2 = 13.4$, $df = 1$, $p < 0.001$), whereas significantly more community midwives (29%) felt that 16+ weeks was a more appropriate time to ask questions (continuity corrected $\chi^2 = 4.33$, $df = 1$, $p < 0.05$; $p = 0.037$) (see Table 3).

How many midwives actually made an enquiry?

Participants were asked how many had actually raised the issue of DV with a client, and only 38% of the cohort reported that they had done so. Significantly fewer hospital midwives (22%) had addressed the issue of DV with a client (continuity corrected $\chi^2 = 36.1$, $df = 1$, $p < 0.001$) (see Table 3).

Confidence levels of midwives in addressing DV with their clients

Community midwives (27%) were significantly more confident in addressing DV with their clients than hospital midwives (15%) (χ^2 for trend = 7.02, $df = 1$, $p = 0.008$). When the midwives' confidence in recognising signs of DV in their client population was examined, an observed trend towards greater confidence was found among 28% of community midwives compared with 21% of hospital midwives, but this did not quite reach statistical significance (χ^2 for trend = 3.08, $df = 1$, $p = 0.079$).

Private facilities within health-care settings to discuss DV

A significantly higher percentage of community midwives (71%) compared with hospital midwives (54%) reported that they were aware of facilities in their practice settings that offered privacy for a woman to discuss DV confidentially (continuity corrected $\chi^2 = 8.08$, $df = 1$, $p = 0.004$).

Table 3 Midwives' perceived role in responding to domestic violence and screening of women in their health-care setting.

Midwives' self-reported response (n = 488)	Hospital setting		Community setting		Chi squared 1 df p-value
	n	%	n	%	χ^2 , p-value
Role to play in responding to domestic violence					
Yes	360	92.1	88	92.6	
No	31	7.9	7	7.4	
Missing	4	—	—	—	
Screening all pregnant women for domestic violence					
Yes	202	52.1	52	55.3	$\chi^2 = 1.35$ $p = 0.25$
Unsure	114	29.4	31	33.0	
No	72	18.6	11	11.7	
Missing	5	—	1	—	
Appropriate time to screen					
Booking visit					
Yes	248	64.9	40	43.5	$\chi^2 = 13.4$ $p < 0.001$
No	134	35.1	52	56.5	
Missing	11	—	3	—	
16+ weeks					
Yes	72	18.8	27	29.3	$\chi^2 = 4.33$ $p = 0.037$
No	310	81.2	65	70.7	
Missing	11	—	3	—	
Asking about domestic violence					
Yes	84	22.0	51	53.7	$\chi^2 = 37.3$ $p < 0.001$
No	298	78.0	44	46.3	
Missing	11	—	—	—	
Confident to address domestic violence					
Yes	60	15.4	25	26.6	$\chi^2 = 7.02$ $p = 0.008$
Unsure	87	22.3	22	23.4	
No	243	62.3	47	50	
Missing	3	—	1	—	
Confident to identify domestic violence					
Yes	82	21.3	26	27.7	$\chi^2 = 3.08$ $p = 0.079$
Unsure	127	33.0	34	36.2	
No	176	45.7	34	36.2	
Missing	8	—	1	—	

df, degrees of freedom.

Percentages in the tables were calculated after removal of the non-responders; however, for completeness, the number of non-responders is shown.

(see Table 4). When the participants were asked if they had tried to provide an opportunity to speak to a women in private, cross-tabulation demonstrated a significantly higher percentage of community midwives (92%) offering privacy to the client compared with 80% of hospital midwives (continuity corrected $\chi^2 = 5.77$, $df = 1$, $p = 0.016$) (see Table 4).

Seventy-three per cent of community midwives frequently or always had an opportunity to talk to a client alone in private, while hospital midwives

were significantly less likely to speak with a client alone (linear by linear association $\chi^2 = 42.7$, $df = 1$, $p = 0.001$) (see Table 5).

Midwives' awareness of private facilities and midwives' confidence to address DV

In the hospital setting, there was a tendency for midwives with greater confidence to be aware of the availability of private facilities to interview

Table 4 Midwives' knowledge and use of facilities to interview women in private.

Midwives' self-reported response (488)	Hospital setting		Community setting		Chi-squared 1 df p -value χ^2 , p -value
	n	%	n	%	
Aware of facilities to interview in private					
Yes	207	54.0	66	71.0	$\chi^2 = 8.08$ $p = 0.004$
No	176	46.0	27	29.0	
Missing	10	—	2	—	
Used facilities to speak to client in private					
Yes	306	80.3	86	91.5	$\chi^2 = 5.77$ $p = 0.016$
No	75	19.7	8	8.5	
Missing	12	—	1	—	
Difficulties encountered in trying to offer privacy to speak to a client in private					
Yes	167	44.2	55	59.1	$\chi^2 = 6.11$ $p = 0.013$
No	211	55.8	38	40.9	
Missing	15	—	2	—	
Current response effective					
Yes	24	6.3	12	12.8	$\chi^2 = 10.2$ $p = 0.001$
Unsure	107	28.0	36	38.3	
No	251	65.7	46	48.9	
Missing	11	—	1	—	

Percentages in the tables were calculated after removal of the non-responders; however, for completeness, the number of non-responders is shown.

Table 5 Opportunity for midwives to speak to a pregnant woman in private.

Opportunity	Hospital midwives		Community midwives	
	n	%	n	%
Never	9	2	—	—
Seldom	80	21	4	4
Sometimes	154	41	22	23
Frequently	128	34	62	66
Always	8	2	7	7

$\chi^2 = 42.736$, degrees of freedom = 1, $p < 0.001$.

women about DV. In all, 76% of midwives reporting that they were confident in asking pregnant women questions on DV were aware of private facilities, while 50% of those who were unsure or not confident in asking questions were aware of private facilities (linear by linear association $\chi^2 = 5.31$, $df = 1$, $p = 0.021$) (see Table 6). In the community, there was no association between degree of confidence and awareness of private facilities (linear by linear association, $p = 0.28$, exact test).

Barriers

Participants were asked if they had experienced any difficulties in trying to speak to their clients on

their own. Cross-tabulation demonstrated that 59% of the community midwives experienced significantly more difficulties than 44% of the hospital midwives (continuity corrected $\chi^2 = 6.11$, $df = 1$, $p = 0.013$) (see Table 4). The biggest hindrance recorded in the free-text responses for both hospital (78%) and community (89%) midwives was the reluctance of a partner to leave the consultation (see Table 7). It is acknowledged, however, that having the opportunity and acting on the opportunity are not necessarily the same.

When the midwives were asked about their current response to addressing DV in their client population, a significant trend was observed amongst the community midwives, with 13% reporting their response to be effective in addressing

Table 6 Cross-tabulation examining privacy to interview women on domestic violence (DV) versus confident in asking pregnant women questions (Qns) about DV in hospital/community settings.

Hospital/community				Confident in asking pregnant women Qns on DV			Total
				Yes	Unsure	No	
Hospital	Privacy to interview women on DV	Yes	Count	45	42	119	206
			% Within confident in asking pregnant women Qns on DV	76.3	49.4	50.2	54.1
		Unsure	Count	5	20	63	88
			% Within confident in asking pregnant women Qns on DV	8.5	23.5	26.6	23.1
		No	Count	9	23	55	87
			% Within confident in asking pregnant women Qns on DV	15.3	27.1	23.2	22.8
	Total		Count	59	85	237	381
			% Within confident in asking pregnant women Qns on DV	100.0	100.0	100.0	100.0
Community	Privacy to interview women on DV	Yes	Count	20	17	29	66
			% Within confident in asking pregnant women Qns on DV	83.3	77.3	63.0	71.7
		Unsure	Count	0	0	8	8
			% Within confident in asking pregnant women Qns on DV	.0	.0	17.4	8.7
		No	Count	4	5	9	18
			% Within confident in asking pregnant women Qns on DV	16.7	22.7	19.6	19.6
	Total		Count	24	22	46	92
			% Within confident in asking pregnant women Qns on DV	100.0	100.0	100.0	100.0

Hospital: linear by linear association, $\chi^2 = 5.31$, degrees of freedom = 1, $p = 0.021$. Community: linear by linear association, $p = 0.28$ (exact test).

Table 7 Barriers/reasons given by midwives for the difficulties experienced in speaking to a pregnant woman in private.

Barriers/reasons for difficulty	Hospital midwives (n = 167) (%)	Community midwives (n = 55) (%)
Partner reluctant to leave	78	89
Overprotective partner	5	–
No privacy in ward	9	6
Not specified	8	5

this issue (linear by linear association $\chi^2 = 10.2$, $df = 1$, $p < 0.01$) (see Table 4).

Discussion

Healthy settings theory can be used effectively to identify good practice with women who experience DV, as this study goes some way to increasing our understanding of the different conflicting ideologies and knowledge base within hospital- and community-based midwifery health-care settings. Although pregnancy is a time when women come into frequent contact with the health service, and midwives have the rare opportunity to play an important public health role (Dobash et al., 1996; Protheroe et al., 2001; Lutz, 2005), the study findings suggest that identifying and supporting women experiencing DV is a complex and difficult task for midwives. Internationally, the public health role of the midwife (Henderson, 2002; Jasinski, 2004) is developing, and as it increases (Miranda et al., 1998; Shepard et al., 1999) and universal screening is performed, more abused women will need to be evaluated and identified in appropriate and caring ways (Lazenbatt, 2002; Lazenbatt et al., 2005).

Although DV may increase during pregnancy (Stewart and Cecutti, 1993; Webster et al., 1996), many midwives still fail to recognise it or to estimate its prevalence (Helton et al., 1987; McGrath et al., 1998; Bacchus et al., 2005). Although one might assume that midwives should have evidence-based knowledge of the estimated prevalence rate of DV reported in the international literature, in this study, it appeared not to be the case. The midwives were given possible scenarios regarding the prevalence of DV in pregnant women, and then these scenarios were divided into unrealistic (well below presumed prevalence) and realistic (at or about presumed prevalence). As illustrated in Table 2, only one-third of the midwives were realistic in their perception of DV affecting one in four women (Bacchus et al., 2002),

with the remaining two-thirds underestimating the prevalence of DV quite considerably. When the research team looked at this finding in relation to the midwives' practice setting, community midwives had a significantly more realistic view of the prevalence of DV in pregnancy, as the degree of underestimation was found to be greater in the hospital setting (69%) than in the community (54%).

Although people in general have difficulties with estimating prevalence rates, these findings reinforce others internationally which show that health-care professionals often underestimate the rate of DV in their populations (Bewley et al., 1997; Mirrlees-Black, 1999; Naumann et al., 1999; Moon-ey, 2000; Radestad et al., 2004). The reasons for this underestimation are varied. Often, DV is regarded as a psychosocial problem rather than a clinical issue. Professionals such as midwives often feel powerless to assess, or feel that they should not become involved in the first place (Naumann et al., 1999; Peckover, 2003). This appears to be a global phenomenon and not unique to the UK and USA, having also been reported in China (Tiwari et al., 2005), Australia (Webster and Holt, 2004; Gunn et al., 2006), Turkey (Yanikkerem et al., 2006) and Uganda (Kaye et al., 2006). Evidence suggests that a lack of basic knowledge and training can contribute to these underestimations (Parsons et al., 1995; King and Ryan, 1996; Gunn et al., 2006).

Appropriate care relies on identifying women experiencing DV, and health-care settings such as hospitals and the community are appropriate places to implement routine enquiries. Although the main findings show that almost all midwives (92%) felt that they had a significant role to play in responding to DV in their client group, data illustrate that only half of those participating were in favour of routine screening, and only 38% of the cohort had actually made an enquiry. Worryingly, 79% of hospital and 72% of community midwives were unsure or not confident about identifying DV in practice.

The present study also supports the findings of a systematic review of studies of barriers to

screening for DV (Ramsey et al., 2002), which found that health-care professionals gave a range of reasons for not asking women about DV routinely. This is despite evidence which suggests that the great majority of women are not offended when asked about DV (Renker and Tonkin, 2006). Lack of education in or experience of screening, fear of offending or endangering clients, lack of effective interventions, patients not disclosing or not complying with screening, and (the major problem) lack of time (Waalén et al., 2000) were all cited as barriers to screening in the free-text responses from all midwives. Taking these barriers into consideration, when all midwives were asked about their current response to addressing DV in their client population, a higher percentage of community midwives (13%) reported that they were effective in dealing with DV compared with their hospital counterparts (6%).

In NI, women presenting to maternity services are not screened routinely for DV. However, when participants were asked their opinion on whether or not all pregnant women should be, approximately half of the sample, in both the hospital and community settings, were in favour of this practice. Again worryingly, 84% of hospital midwives and 73% of community midwives felt that they were unsure or not confident about screening for DV in practice. However, the need and timing for routine screening did not differ between the health-care settings, as over half of the hospital midwives and 43% of the community midwives were more likely to want to enquire about DV at a booking visit. In contrast, almost one-third of community midwives were more likely than hospital midwives to say that women should not be asked about DV until 16 weeks, stating that they liked to build up a relationship with the woman before enquiring about sensitive issues such as DV. This, they felt, permitted them to work according to a 'women-centred' model of care, which they perceived as more natural and allowed them to demonstrate their knowledge of the psychosocial aspects of maternity care.

Although there was a difference in the responses from the hospital and community midwives regarding the best time to ask pregnant women questions about DV, when asked how many of the participants actually raised the issue of DV with a client, only 38% of both groups reported that they had done so. Interestingly, significantly fewer hospital midwives (22%) had addressed the issue of DV with a client, and free-text responses highlighted that they appeared to be driven by more medically dominant organisational structures and targets, which resulted in them using a more standardised form of care that stressed measures of efficiency,

effectiveness and risk management. They felt that this health setting had an ideology that placed less emphasis on the psychosocial needs of the individual woman, and more on providing care for women experiencing complications, and thus public health issues were seen as low priorities. These findings are consistent with work by Hunter (2004), whose results suggested that the occupational ideology of the hospital midwife was 'with the institution' rather than with a more 'woman-centred' approach.

On the other hand, over half (54%) of the midwives from a community-based setting appear to follow more of the key elements of a healthy settings framework in a number of ways. Firstly, significantly more were able to create a healthy living environment for women experiencing DV by asking their clients about domestic abuse (Poland et al., 2000). Secondly, they integrate health promotion and health empowerment into the health setting by working in partnership with women in their own homes, frequently talking to them about issues such as DV, and are significantly more aware of the availability of and provision of private facilities in which woman can discuss violent relationships. Support such as this allows women to rediscover their self-esteem and confidence, and can give them the first crucial step to break the cycle of power and control exerted by their male partners. Thirdly, they develop links with other settings and with the wider community (Whitelaw et al., 2001). Free-text responses suggest that community midwives are more empowered to use a joined-up approach that includes an understanding of evidence-based research in the area; a clear knowledge of local and national multiprofessional support agencies; and interagency networks and refuges that allows them to give ongoing and appropriate information that in itself can empower women to make their own informed choices about how to deal with abuse. The Code of Professional Conduct exhorts midwives to work collaboratively to enable them to strengthen areas of practice by liaising with other professionals and learning from them (Nursing and Midwifery Council, 2004).

However, these findings need to take into consideration that 46% of community midwives and 78% of hospital midwives felt that they did not want to ask women about DV, or were unsure about how to approach the topic, and a further 50% of community midwives and 62% of hospital midwives were not confident enough to address DV with their clients. To understand why the enquiry rate was so low, the researchers assessed the barriers that midwives faced with the issue of DV. In general, midwives need more confidence in order to make an enquiry, to recognise the signs of DV,

and to know the availability of private facilities within the hospital or community during home visits in order to speak to a client in private.

No difference was observed between hospital and community midwives in relation to their confidence in recognising DV in their client population. Interestingly, less than one-third of community midwives were confident in addressing DV, although they highlighted that the community setting permitted them to develop a relationship with the woman in her own environment, which they felt enabled them to gain considerable knowledge about the client's family and wider community. They stated that this interaction was relaxed and less formal than the hospital setting, and they could pick up clues and signs in a covert way that allowed the woman to 'open up' about issues such as domestic and baby abuse. This style of interaction was seen as a key skill of community-based midwifery, and corresponds to what Carper (1978) calls the 'therapeutic use of self' where the midwife uses all her personal skills to benefit her client in a holistic manner.

The Royal College of Gynaecology and Department of Health guidance is that women should be seen alone during their maternity care (Bewley et al., 1997; Department of Health, 2000), and the Royal College of Midwives' position paper (1997) suggests that midwives should provide a private environment that would allow women to discuss DV discreetly. When all midwives were asked if they had tried to provide an opportunity to speak to women in private, the results demonstrated that more community midwives were aware of facilities or were able to offer privacy to the client to discuss DV confidentially than hospital midwives. Moreover, although a high percentage of both hospital and community midwives reported trying to offer privacy to the client, when asked how often they actually got to speak to a client on their own, the results demonstrated that more community midwives frequently talked to a client alone, while hospital midwives were less likely to speak alone with a client.

Interestingly, 76% of all midwives who reported that they were confident in asking pregnant women about DV were aware of private facilities, while only 50% of those unsure or not confident were aware of private facilities. When all midwives were asked if they had experienced any difficulties in trying to speak to their clients on their own, the results demonstrated that 59% of community midwives experienced more difficulties than 44% of hospital midwives. The study shows that those hospital midwives with greater confidence in asking women about DV were also more aware of private facilities.

All midwives were asked to specify the difficulties they encountered in trying to speak to their clients in private. The biggest hindrance recorded for both hospital (78%) and community (89%) midwives was the reluctance of a partner to leave the consultation. Recent changes in midwifery practice designed to demedicalise childbirth may, in reality, be reducing the possibility of effective intervention. This finding corresponds to international research evidence which highlights that maternity services are no longer woman-only spaces because women are now accompanied by their partners when attending antenatal clinics, and partners are often present in community appointments (Hester et al., 1996; Hunt and Martin, 2001; Marchant et al., 2001; Protheroe et al., 2001; Taket et al., 2003).

Conclusions

While every effort was made to ensure a rigorous and systematic approach, there are important limitations to this study. Firstly, the data are based on a sample of midwives in NI and the findings may not be generalisable to similar groups of participants outside this health setting. Secondly, the overall response rate was 57%, thus limiting the ability to extrapolate the results of this study to those who did not respond. Nevertheless, the response rate should be considered reasonable by social research standards, given the fact that it was targeted at staff working under demanding time constraints. Moreover, several of the findings are consistent with other international research studies on this topic (King and Ryan, 1996; Thompson et al., 2000; Marchant et al., 2001; Bacchus et al., 2002; Espinosa and Osborne, 2002; Mezey et al., 2003; Nasir and Hyder, 2003; Price, 2003; Jasinski, 2004; Protheroe et al., 2004).

The paper highlights that midwives *per se* identify and respond to a fraction of the cases of DV in pregnancy due to a lack of confidence and up-to-date knowledge and education. This finding reinforces the need for both hospital and community midwives to gain further confidence and an understanding of the psychosocial issues surrounding DV. Limited confidence is often underpinned by lack of education (Peckover, 2000; Mezey et al., 2005), and the research team recommend that to achieve joint action to deal with DV, life-long learning and education should take place within an interdisciplinary approach and using interagency expertise (Bewley et al., 1997; McMurray et al., 2004). Moreover, to increase their confidence, midwives need to learn to recognise

benign conditions that might inadvertently be mistaken for DV if unnecessary distress is to be curtailed. On the other hand, some midwives may themselves be victims of abuse, and education and skills training would be a vital support mechanism for these professionals.

However, the findings correspond to international evidence which suggests that midwives in hospital settings may be concentrating more on 'high-tech' maternity care and the physiological aspects of care, rather than the provision of psychosocial support for new mothers. They also feel more isolated from community agencies and interagency support services that deal with victim abuse (Henderson, 2002; Hunter, 2004; Jasinski, 2004). On the other hand, the findings suggest that community midwives appear to be working more within a healthy settings approach.

Globally, effective investment for health care requires the gaps between health-care settings to be bridged and for work to be coordinated and integrated. Only in this way can action on DV in both hospital and community settings feed into wider public health developments for midwives and other health-care professionals. However, what is evident from the study is that there is, in reality, a diversity of midwifery practice that deals with DV and reflects not only different models of health promotion, and different analyses of the 'problem' and the 'solution', but also different organisational settings with differing degrees of opportunity and constraint. Clearly, for the potential of a healthy settings approach to be fully realised, bridges and communications must be built between midwives working in different settings. A health setting such as a maternity hospital cannot be seen in isolation as it exists within a community, and a fundamental aspect of healthy settings work is the involvement of the wider community and the development of healthy alliances and partnership working. Indeed, quite apart from the fact that one health setting can learn a lot from another, it is clear that in relation to specific topics such as DV, an issue impacting on health in one health setting can frequently have its origin or solution in another. The realisation is, as Dooris (2004) notes, 'often what is missing is the underpinning communications to link the systems together'.

References

- Altman, D.G., 1991. *Practical Statistics for Medical Research*. Chapman & Hall, London.
- Amaro, H., Fried, L.E., Cabral, H., et al., 1990. Violence during pregnancy and substance use. *American Journal of Public Health* 80, 575–579.
- Antonovsky, A., 1987. *Unravelling the Mystery of Health*. Jossey-Boss, San Francisco.
- Bacchus, L., Mezey, G., Bewley, S., 2002. Women's perceptions and experiences of routine enquiry for domestic violence in a maternity service. *British Journal of Obstetrics and Gynaecology* 109, 9–16.
- Bacchus, L., Mezey, G., Bewley, S., et al., 2005. Prevalence of domestic violence when midwives routinely enquire in pregnancy. *Obstetrical and Gynecological Survey* 60, 11–13.
- Baird, K., 2002. Domestic violence in pregnancy: a public health concern. *MIDIRS Midwifery Digest* 12 (Suppl 1), S12–S15.
- Baric, L., 1993. The settings approach—implications for policy and strategy. *Journal of the Institute of Health Education* 31, 17–24.
- Baric, L., 1994. *Health Promotion and Health Education in Practice: Module 2—the Organizational Model*. Barns, Altrincham.
- Bewley, S., Friend, J.R., Mezey, G.C., 1997. *Violence Against Women*. Royal College of Obstetricians and Gynaecologists, London.
- Bradley, F., Smith, M., Long, J., et al., 2002. Reported frequency of domestic violence: cross sectional survey of women attending general practice. *British Medical Journal* 324, 271.
- British Medical Association, 1998. *Domestic Violence: a Health Care Issue*. BMA, London.
- Carper, B.A., 1978. Fundamental patterns of knowing in nursing. *Advanced Nursing Science* 1, 13–23.
- Community Practitioners and Health Visitors Association, 1998. *Domestic Violence: the Role of the Community Nurse*. CPHVA, London.
- Connolly, A., Katz, V.I., Bash, K.L., et al., 1997. Trauma and pregnancy. *American Journal of Perinatology* 14, 331–336.
- Craig, C., 2003. *Domestic Violence and Health Professionals*. Northern Ireland Women's Aid Federation, Belfast.
- Cronbach, L.J., Meehl, P.E., 1955. Construct validity in psychological tests. *Psychological Bulletin* 52, 281–302.
- Davidson, L.L., King, V., Garcia, J., 2000. *Health Services in Reducing Domestic Violence—What Works? Briefing Notes*. Home Office, London.
- Department of Health, 2000. *Domestic Violence: a Resource Manual for Health Care Professionals*. Department of Health, London.
- Department of Health, 2001. *Children in Northern Ireland: Domestic Violence and Professional Awareness*. Department of Health, Belfast.
- Department of Health and Social Services and Northern Ireland Office, 1995. *Tackling Domestic Violence—a Policy for Northern Ireland*. DHSS and NIO, Belfast.
- Department of Health, Social Services and Public Safety, 2003. *Tackling Violence at Home: the Government's Proposals on Domestic Violence in Northern Ireland*. DHSSPS, Belfast.
- Dobash, R., Dobash, R., Cavanagh, K., et al., 1996. *Research Evaluation of Programmes for Violent Men*. Scottish Office Central Research Unit, Edinburgh.
- Dooris, M., 2002. Healthy settings: theory and practice. In: Dooris, M., Hobbs, A. (Eds.), *Healthy Settings in England's North West: Report of Conference*. University of Central Lancashire, Preston.
- Dooris, M., 2004. Joining-up settings for health: a valuable investment for strategic partnerships? *Critical Public Health* 14, 37–49.
- Dooris, M., Dowding, G., Thompson, J., et al., 1998. The settings-based approach to health promotion. In: Tsouros, A., Dowding, G., Thompson, J., Dooris, M. (Eds.), *Health Promoting Universities: Concept, Experience and Framework for Action*. WHO Regional Office for Europe, Copenhagen.

- <<http://www.who.dk/document/E60163.pdf>> Last accessed 26 November 2007.
- Espinosa, L., Osborne, K., 2002. Domestic violence during pregnancy: implications for practice. *Journal of Midwifery and Women's Health* 47, 305–317.
- Freund, K.M., Bak, S.M., Blackhall, L., 1996. Identifying domestic violence in primary care practice. *Journal of General Internal Medicine* 11, 44–46.
- Gazmararian, J.A., Lazorick, S., Spitz, A.M., et al., 1996. Prevalence of violence against pregnant women: a review of the literature. *Journal of the American Medical Association* 275, 1915–1920.
- Gielen, A.C., O'Campo, P.J., Campbell, J.C., et al., 2000. Women's opinions about domestic violence screening and mandatory reporting. *American Journal of Preventive Medicine* 19, 279–285.
- Grossman, R., Scala, K., 1993. Health Promotion and Organizational Development: Developing Settings for Health. WHO Regional Office for Europe, Copenhagen.
- Gunn, J., Hegarty, K., Nagle, C., et al., 2006. Putting woman-centered care into practice: a new (ANEW) approach to psychosocial risk assessment during pregnancy. *Birth* 33, 46–55.
- Helton, A.S., McFarlane, J., Anderson, E., 1987. Battered and pregnant: a prevalence study. *American Journal of Public Health* 77, 1337–1339.
- Henderson, C., 2002. The public health role of the midwife. *British Journal of Midwifery* 10, 268–270.
- Hester, M., Kelly, L., Radford, J., 1996. *Women, Violence and Male Power*. Open University Press, Buckingham.
- Home Office, 2003. *British Crime Survey*. Home Office, London.
- House of Commons Select Committee, 2003. *Fourth Report—Provision of Maternity Services*. Stationery Office, London.
- Hunt, S., Martin, A., 2001. *Pregnant Women, Violent Men: What Midwives Need to Know*. Books for Midwives, Hale.
- Hunter, B., 2004. Conflicting ideologies as a source of emotion work in midwifery. *Midwifery* 20, 261–272.
- Jasinski, J.L., 2004. Pregnancy and domestic violence: a review of the literature. *Trauma Violence Abuse* 5, 47–64.
- Jewkes, R.L., Levin, J., Loveday, P., 2002. Risk factors for domestic violence: findings from a South African cross-sectional study. *Social Science and Medicine* 55, 1603–1617.
- Johnson, J.K., Haider, F., Ellis, K., et al., 2003. The prevalence of domestic violence in pregnant women. *British Journal of Obstetrics and Gynaecology* 110, 272–275.
- Kaye, D.K., Mirembe, F.M., Bantebya, G., et al., 2006. Domestic violence as risk factor for unwanted pregnancy and induced abortion in Mulago Hospital, Kampala. *Uganda Tropical Medicine and International Health* 11, 90–101.
- Kickbusch, I., 1995. An overview to the settings-based approach to health promotion. In: Theaker, T., Thompson, J. (Eds.), *The Settings-based Approach to Health Promotion: Conference Report*. Hertfordshire Health Promotion, Welwyn Garden City.
- Kickbusch, I., 2003. The contribution of the World Health Organization to a new public health and health promotion. *American Journal of Public Health* 93, 383–388.
- Kim, J., Motsei, M., 2002. Women enjoy punishment: attitudes and experiences of gender-based violence among PHC nurses in rural South Africa. *Social Science and Medicine* 54, 1243–1254.
- King, M.C., Ryan, J., 1996. Woman abuse: the role of nurse-midwives in assessment. *Journal of Nurse-Midwifery* 41, 436–441.
- Lazenbatt, A., 2002. *Handbook for Evaluation for Health Professionals*. Routledge, London.
- Lazenbatt, A., McMurray, F., Cree, L., 2005. Evaluating midwives' attitudes and stereotypical myths related to the identification and management of DV in practice: the use of exploratory factor analysis. *Midwifery* 21, 322–334.
- Lemon, S.C., Verhoek-Oftedahl, W., Donnelly, E.F., 2002. Preventive healthcare use, smoking, and alcohol use among Rhode Island women experiencing intimate partner violence. *Journal of Women's Health and Gender-Based Medicine* 11, 555–562.
- Lutz, K.F., 2005. Abused pregnant women's interaction with health care providers during the childbearing year. *Journal of Obstetric, Gynecologic, and Neonatal Nursing* 34, 151–162.
- Marchant, S., Davidson, L.L., Garcia, J., et al., 2001. Addressing domestic violence through maternity services: policy and practice. *Midwifery* 7, 164–170.
- Martin, S.L., Mackie, L., Kupper, L.L., et al., 2001. Physical abuse of women before, after and during pregnancy. *Journal of the American Association* 285, 3176–3178.
- McGrath, M.E., Hogan, J.W., Peysert, J.F., 1998. A prevalence survey of abuse and screening for abuse in urgent care patients. *Journal of Obstetrics and Gynaecology* 91, 511–514.
- McMurray, F., Lazenbatt, A., McAlearney, A., 2004. Prospective evaluation of an Inter-professional Education Programme for Midwives and Doctors: Learning together to provide women-centred care. Report to NIPEC, Queen's University Belfast, Northern Ireland, 58pp.
- Mezey, G.C., Bewley, S., 1997. Domestic violence and pregnancy. *British Medical Journal* 314, 1295.
- Mezey, G.C., Bacchus, L., Haworth, A., et al., 2003. Midwives' perceptions and experiences of routine enquiry for domestic violence. *British Journal of Obstetrics and Gynaecology* 110, 744–752.
- Mezey, G.C., Bacchus, L., Bewley, S., et al., 2005. Domestic violence, lifetime trauma and psychological health of child-bearing women. *British Journal of Obstetrics and Gynaecology* 112, 197–204.
- Ministry of Health, New Zealand, 2002. *Family Violence Intervention Guidelines*. Child and Partner Abuse. Ministry of Health, Wellington.
- Miranda, J., Azocar, F., Komaromy, M., et al., 1998. Unmet mental health needs of women in public-sector gynaecologic clinics. *American Journal of Obstetrics and Gynecology* 178, 212–217.
- Mirrlees-Black, C., 1999. Domestic Violence: Findings from the British Crime Survey Self Completion Questionnaire. Home Office, London.
- Mooney, G., 2000. The values of public health: hopefully not a final word. *Australian and New Zealand Journal of Public Health* 24, 116.
- Nasir, K., Hyder, A.A., 2003. Violence against pregnant women in developing countries. *European Journal of Public Health* 13, 105–107.
- Naumann, P., Langford, D., Torres, S., et al., 1999. Women battering in primary care practice. *Family Practice* 16, 343–352.
- Nursing and Midwifery Council, 2004. *Rules and Standards*. Nursing and Midwifery Council, London.
- Paluzzi, P.A., Houde-Quimby, C.H., 1996. Domestic violence implications for the American College of Nurse-Midwives and its members. *Journal of Nurse-Midwifery* 41, 430–435.
- Parker, B., McFarlane, J., Soeken, K., 1999. Testing an intervention to prevent further abuse to pregnant women. *Research in Nursing and Health* 22, 59–68.
- Parsons, L.H., Zaccaro, D., Wells, B., et al., 1995. Methods of attitudes towards screening obstetrics and gynecology

- patients for domestic violence. *American Journal of Obstetrics and Gynecology* 173, 381–388.
- Paton, K., Sengupta, S., Hassan, L., 2005. Settings, systems and organization development: the Healthy Living and Working Model. *Health Promotion International* 20, 81–89.
- Peckover, S., 2000. Domestic Violence: a Framework of Good Practice. Professional Briefing Paper. Community Practitioners and Health Visitors Association, London.
- Peckover, S., 2003. Health visitors' understanding of domestic violence. *Journal of Advanced Nursing* 44, 200–208.
- Poland, B., Green, L., Rootman, I., 2000. Settings for Health Promotion: Linking Theory and Practice. Sage, London.
- Price, S., 2003. Domestic violence. In: Squire, C. (Ed.), *The Social Context of Birth*. Ratcliffe Medical Press, UK.
- Protheroe, L., Green, J., Spiiby, H., 2001. An interview study of the impact of domestic violence training on midwives. *Midwifery* 20, 94–103.
- Protheroe, L., Green, J., Spiiby, H., 2004. An interview study of the impact of domestic violence training on midwives. *Midwifery* 20 (1), 94–103.
- Radestad, I., Rubertsson, C., Ebeling, M., et al., 2004. What factors in early pregnancy indicate that the mother will be hit by her partner during the year after childbirth? A nationwide Swedish survey. *Birth* 31, 84–92.
- Ramsey, J., Richardson, J., Carter, Y.H., et al., 2002. Should health professionals screen women for domestic violence? Systematic review. *British Medical Journal* 325, 1–13.
- Renker, P.R., Tonkin, P., 2006. Women's views of prenatal violence screening: acceptability and confidentiality issues. *Obstetrics and Gynecology* 107, 348–354.
- Richardson, J., Coid, J., Petruckevitch, A., et al., 2002. Identifying domestic violence: cross sectional study in primary care. *British Medical Journal* 324, 1–6.
- Royal College of Midwives, 1997. Domestic Abuse in Pregnancy. Position paper no. 19a. RCM, London.
- Royal College of Nursing, 2000. Domestic Violence: Guidance for Nurses. RCN, London.
- Shadigian, E.M., Bauer, S.T., 2004. Screening for partner violence during pregnancy. *International Journal of Gynecology and Obstetrics* 84, 273–280.
- Shepard, M.F., Elliott, B.A., Falk, D.R., et al., 1999. Public health nurses' responses to domestic violence: a report from the Enhanced Domestic Abuse Intervention Project. *Public Health Nursing* 16, 359–366.
- Shumway, J., O'Campo, P., Gielen, A., et al., 1999. Preterm labour, placental abruption and premature rupture of membranes in relation to maternal violence or verbal abuse. *The Journal of Maternal-Fetal Medicine* 8, 76–80.
- State of Western Australia and Department of Health, 2001. Responding to Family and Domestic Violence. A Guide for Health Care Professionals in Western Australia. Eastern Perth Public and Community Health Unit, Perth.
- Stewart, D.E., Cecutti, A., 1993. Physical abuse in pregnancy. *Canadian Medical Association Journal* 149, 1257–1263.
- Taket, A., Nurse, J., Smith, K., et al., 2003. Routinely asking women about domestic violence in health settings. *British Medical Journal* 327, 673–676.
- Thompson, R.S., Rivara, F.P., Thompson, D.C., et al., 2000. Identification and management of domestic violence: a randomized trial. *American Journal of Preventive Medicine* 19, 253–263.
- Tiwari, A., Leung, W.C., Leung, T.W., et al., 2005. A randomised controlled trial of empowerment training for Chinese abused pregnant women in Hong Kong. *British Journal of Obstetrics and Gynaecology* 112, 1249–1256.
- Tjaden, P., Tjaden, P., 2000. Full Report of the Prevalence, Incidence, and Consequences of Violence Against Women. National Institute of Justice, Centres for Disease Control and Prevention, Washington, DC.
- US Congress, 2005. Violence Against Women Act. US Congress, Washington, DC.
- Waalén, J., Goodwin, M.M., Spitz, A.M., et al., 2000. Screening for intimate partner violence by healthcare providers: barriers and interventions. *American Journal of Preventive Medicine* 19, 230–237.
- Webster, J., Holt, V., 2004. Screening for partner violence: direct questioning or self-report? *Obstetrics and Gynecology* 103, 299–303.
- Webster, J., Chandler, J., Battistutta, D., 1996. Pregnancy outcomes and health care use: effects of abuse. *American Journal of Obstetrics and Gynecology* 174, 760–767.
- Whitelaw, S., Baxendale, A., Bryce, C., et al., 2001. Settings-based health promotion: a review. *Health Promotion International* 16, 339–353.
- World Health Organization, 1986. The Ottawa Charter: Principles for Health Promotion. WHO Regional Office for Europe, Copenhagen.
- World Health Organization European Working Group, 1998a. Health Promotion Evaluation: Recommendations to Policymakers. WHO, Geneva.
- World Health Organization, 1998b. Health 21—the Health for All Policy for the WHO European Region—21 Targets for the 21st Century. WHO, Copenhagen.
- World Health Organization, 2000. Violence against women. Factsheet No. 239, WHO, Copenhagen.
- World Health Organization, 2002. World Report on Violence and Health. WHO, Geneva.
- Yanikkerem, E., Karadas, G., Adiguzel, B., et al., 2006. Domestic violence during pregnancy in Turkey and responsibility of prenatal healthcare providers. *American Journal of Perinatology* 23, 93–104.